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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,505	02/05/2004	Martin Kruger	068758.0159	6898

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PATENT DEPARTMENT
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EXAMINER	
ZHENG, EVA Y	

ART UNIT	PAPER NUMBER
2611	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/772,505	KRUGER, MARTIN	
	Examiner	Art Unit	
	Eva Yi Zheng	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 12-16* is/are rejected.

7)☒ Claim(s) *6-11 and 17-21* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 14 and 15 are objected to because of the following informalities: claim languages appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Examiner suggests to change claim preamble to be -- ....data packets transmitted reliable without errors .... --.

Appropriate correction is required.

2. Claim 15 is objected to because of the following informalities: step (a) and step (b) need to interchange orders in order to be consistent with specification and disclosures.

3. Claim 15 is objected to because of the following informalities: on line 7, please delete "the" before "decoded".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-5, and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood et al (US 6,092,230) IDS, in view of Yung (US 6,578,162).

a) Regarding to claim 1, Wood et al disclose a device for detecting data packets transmitted not reliably without errors in a radio receiver, particularly in a mobile radio receiver, comprising

- a convolutional decoder for decoding the received data packets (400 in Fig. 4),

- means for assessing the quality of the decoded data packets with respect to their freedom from errors (402 in Fig. 4),

-comparison means which compare parameters characteristic of the quality of the decoder data packets with threshold values, the data packets being accepted, discarded or modified in dependence on the result of the comparison (410 in Fig. 4).

Wood et al. disclose a radiotelephone communication system determining different signaling environments and establishing threshold values based upon to the different signaling environments (abstract; Fig. 5; Col 6, L13-25). However, Wood et al. failed to teach that different signaling environment includes whether the transmission channel is rapidly varying or slowly varying.

Yung, in the same field of endeavor, teaches adaptive speed control in a speech communication system (8 in Fig. 1 and 16 in Fig. 2). Therefore, it is obvious to one of ordinary skill in art to combine the teaching of adaptive speed control of Yung in the radiotelephone communication system of Wood. By doing so, provide better and faster bad frame detection in adaptive speed environment. Also provide optimum speech detection in a receiver.

b) Regarding to claim 2, Wood et al disclose wherein the means for assessing the quality of the decoded data packets comprise a convolutional coder for recoding the decoded data (404 in Fig. 4).

c) Regarding to claim 3, Wood et al disclose the device as claimed in claim 2, wherein the means for assessing the quality of the decoded data packets comprise at least one XOR operation by means of which the deviations between the received data and the data recoded by the convolutional coder can be detected (407 in Fig. 4).

d) Regarding to claim 4, Wood et al disclose the device as claimed in claim 2, wherein the means for assessing the quality of the decoded data packets comprise an error counter which counts the number of errors as the number of deviations between the received data and the data recoded by the convolutional coder (408 in Fig. 4; Col 6, L10-13).

e) Regarding to claim 5, Wood et al disclose the device as claimed in claim 4, wherein the comparison means compare the number of errors determined by the error counter with at least one threshold value, the data packets being accepted, discarded or modified in dependence on the result of the comparison (410 in Fig. 4; Col 6, L13-25).

f) Regarding to claim 12, Wood et al disclose the device as claimed in claim 1, wherein the comparison means for determining data packets having a high degree of errors perform a comparison between the parameters characteristic of the quality of the data packets and a first threshold value, and the comparison means for determining data packets having a lower degree of errors perform a comparison between the

parameters characteristic of the quality of the data packets and a second threshold value which is smaller than the first threshold value (Fig. 5).

g) Regarding to claim 13, Wood et al disclose the device as claimed in claim 1, wherein the transmission channel is a hale-rate channel and, in particular, a half-rate voice channel (radiotelephone communication system comprises a convolutional encoder 404 in Fig. 4; it is well known that a convoltional encoder can operated at either half or full rate).

h) Regarding to claim 14, Wood et al disclose a mobile radio receiver which comprises a device for detecting data packets transmitted not reliably without errors in a radio receiver comprising

- a convolutional decoder for decoding the received data packets (400 in Fig. 4),

- means for assessing the quality of the decoded data packets with respect to their freedom from errors (402 in Fig. 4),

-comparison means which compare parameters characteristic of the quality of the decoder data packets with threshold values, the data packets being accepted, discarded or modified in dependence on the result of the comparison (410 in Fig. 4).

Wood et al. disclose a radiotelephone communication system determining different signaling environments and establishing threshold values based upon to the different signaling environments (abstract; Fig. 5; Col 6, L13-25). However, Wood et al. failed to teach that different signaling environment includes whether the transmission channel is rapidly varying or slowly varying.

Yung, in the same field of endeavor, teaches adaptive speed control in a speech communication system (8 in Fig. 1 and 16 in Fig. 2). Therefore, it is obvious to one of ordinary skill in art to combine the teaching of adaptive speed control of Yung in the radiotelephone communication system of Wood. By doing so, provide better and faster bad frame detection in adaptive speed environment. Also provide optimum speech detection in a receiver.

i) Regarding to claim 15, Wood et al disclose a method for detecting data packets transmitted not reliably without errors in a radio receiver, particularly in a mobile radio receiver, comprising the following steps:

b) assessing the quality of the decoded data packets with respect to their freedom
from errors (402 in Fig. 4);

d) comparing parameters characteristic of the quality of the decoded data packets
determined in step b) with the established threshold values (410 in Fig. 4); and

e) accepting, discarding or modifying the data packets in dependence on the result of the comparison (207 in Fig. 4; Col 6, L22-25).

Wood et al. disclose a radiotelephone communication system determining different signaling environments and establishing threshold values based upon to the different signaling environments (abstract; Fig. 5; Col 6, L13-25). However, Wood et al. failed to teach that different signaling environment includes whether the transmission channel is rapidly varying or slowly varying.

Yung, in the same field of endeavor, teaches adaptive speed control in a speech communication system (8 in Fig. 1 and 16 in Fig. 2). Therefore, it is obvious to one of ordinary skill in art to combine the teaching of adaptive speed control of Yung in the radiotelephone communication system of Wood. By doing so, provide better and faster bad frame detection in adaptive speed environment. Also provide optimum speech detection in a receiver.

j) Regarding to claim 16, Wood et al disclose wherein the comparison means compare the number of errors determined for each data packet is compared with at least one threshold value (410 in Fig. 4; Col 6, L13-25).

Allowable Subject Matter

6. Claims 6-11 and 17-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Y Zheng whose telephone number is 571-272-3049. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eva Yi Zheng
Examiner
Art Unit 2611

February 27, 2007

Chieh M Fan

CHIEH M. FAN
SUPERVISORY PATENT EXAMINER